

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A digital recording apparatus that obtains a digital stream including a plurality of frames, while recording the digital stream on a digital recording medium, the digital recording apparatus comprising:

an obtaining unit operable to obtain, during a recording, an instruction to perform a predetermined procedure in which a recording area for the recording has to be changed from a first recording area to a second recording area which is not necessarily continuous to the first recording area; and

an execution control unit operable to, in case that the obtaining unit obtains the instruction and when the number of frames which are recorded in the first recording area is a predetermined number or more,

(1) execute the predetermined procedure, and
(2) allow the recording area to be changed from the first recording area to the second recording area after the execution of the procedure,

wherein the digital recording apparatus is operable to record the digital stream as one object or to partition the digital stream into a plurality of objects and record the partitioned objects.

wherein each of the objects is recorded on a continuous recording area on the digital recording medium, and the continuous recording area is not necessarily continuous with other recording areas,

wherein the obtaining unit includes:

a receiving unit operable to receive an instruction for a procedure during recording; and

a discrimination unit operable to discriminate whether the instruction received by the receiving unit is an instruction for the predetermined procedure in which a first object has to be partitioned concurrently with the execution of the procedure, or an instruction for other procedures.

wherein recording times of all frames included in a same object are continuous,

wherein the predetermined procedure includes a recording pause, and

wherein the other procedures include cancellation of the recording pause,

wherein the execution control unit includes:

an execution permitting unit operable, when the discrimination unit recognizes that the receiving unit has received the instruction for the recording pause, to

(1) immediately permit the execution of the recording pause, in case that the number of frames included in the first object is the predetermined number or more, and

(2) wait for the number of frames included in the first object to increase to the predetermined number or more and then permit the execution of the recording pause, in case that the number of frames included in the first object is less than the predetermined number;

an execution unit operable to

(1) allow recording to pause and make the apparatus enter a standby mode, when the execution permitting unit permits the execution of the recording pause, and

(2) allow recording to be resumed, when the discrimination unit recognizes that the receiving unit has received the instruction for the cancellation of the recording pause during the standby mode; and

a recording area changing unit operable to allow the first object being recorded on the first recording area to be completed before the execution of the recording pause by the execution unit and to allow the second object to be recorded on the second recording area after the execution unit allows the resumption of recording.

2-8. (Canceled)

9. (Currently Amended) The digital recording apparatus of Claim [[8]] 1, wherein it takes a certain amount of time for a reproduction head of a reproduction apparatus to seek an object from another object, when the two objects are continuously reproduced using the reproduction apparatus and are not continuous with each other on the digital recording medium, and

wherein the predetermined number specified by the execution control unit is not less than a number that is necessary for realizing a seamless reproduction without being influenced by the expected maximum seeking time.

10. (Previously Presented) The digital recording apparatus of Claim 9, wherein the digital recording medium is a writable DVD-disk,

wherein the digital recording apparatus is a DVD recording apparatus that records a digital video stream on the writable DVD-disk, and

wherein the object is a VOB conforming to the DVD-VideoRecording standard.

11. (Currently Amended) A digital recording program stored on a computer readable medium that has a computer obtain a digital stream including of a plurality of frames, while recording the digital stream on a digital recording medium,

the program having the computer conduct a method comprising the steps of:

(a) an obtaining step of obtaining, during a recording, an instruction to perform a predetermined procedure in which a recording area for the recording is changed from a first recording area to a second recording area which is not necessarily continuous to the first recording area; and

(b) an execution control step of, in case that the instruction is obtained in the obtaining step and when the number of frames which are recorded in the first recording area is a predetermined number or more,

(1) executing the predetermined procedure, and

(2) allowing the recording area to be changed from the first recording area to the second recording area after the execution of the procedure,

wherein the digital recording program is operable to cause the computer to record the digital stream as one object or to partition the digital stream into a plurality of objects and record the partitioned objects.

wherein each of the objects is recorded on a continuous recording area on the digital recording medium, and the continuous recording area is not necessarily continuous with other recording areas.

wherein the obtaining step includes:

a receiving substep of receiving an instruction for a procedure during recording;
and

a discrimination substep of discriminating whether the instruction received in the receiving substep is an instruction for the predetermined procedure in which a first object has to be partitioned concurrently with the execution of the procedure, or an instruction for other procedures.

wherein recording times of all frames included in a same object are continuous,
wherein the predetermined procedure includes a recording pause, and
wherein the other procedures include cancellation of the recording pause,
wherein the execution control step includes:

an execution permitting substep of, when the discrimination substep recognizes that the instruction for the recording pause has been received in the receiving substep,

(1) immediately permitting the execution of the recording pause, in case that the number of frames included in the first object is the predetermined number or more, and
(2) waiting for the number of frames included in the first object to increase to the predetermined number or more and then permitting the execution of the recording pause, in case that the number of frames included in the first object is less than the predetermined number;

an execution substep of

(1) allowing recording to pause and make the computer enter a standby mode,

when the execution permitting substep permits the execution of the recording pause, and

(2) allowing recording to be resumed, when the discrimination substep recognizes

that the instruction for the cancellation of the recording pause has been received during the

standby mode in the receiving substep; and

a recording area changing substep of allowing the first object being recorded on
the first recording area to be completed before the execution of the recording pause by the
execution substep and allowing the second object to be recorded on the second recording area
after the execution substep allows the resumption of recording.

12-15. (Canceled)

16. (Currently Amended) A digital recording method for obtaining a digital stream consisting of a plurality of frames, while recording the digital stream on a digital recording medium,

the digital recording method comprising the steps of:

(a) an obtaining step of obtaining, during a recording, an instruction to perform a predetermined procedure in which a recording area for the recording is changed from a first recording area to a second recording area which is not necessarily continuous to the first recording area; and

(b) an execution control step of, in case that the instruction is obtained in the obtaining step and when the number of frames which are recorded in the first recording area is a predetermined number or more,

- (1) executing the predetermined procedure, and
- (2) allowing the recording area to be changed from the first recording area to the second recording area after the execution of the procedure,

wherein the digital recording method includes recording the digital stream as one object or partitioning the digital stream into a plurality of objects and recording the partitioned objects.

wherein each of the objects is recorded on a continuous recording area on the digital recording medium, and the continuous recording area is not necessarily continuous with other recording areas.

wherein the obtaining step includes:

a receiving substep of receiving an instruction for a procedure during recording;
and

a discrimination substep of discriminating whether the instruction received in the receiving substep is an instruction for the predetermined procedure in which a first object has to be partitioned concurrently with the execution of the procedure, or an instruction for other procedures.

wherein recording times of all frames included in a same object are continuous.

wherein the predetermined procedure includes a recording pause, and

wherein the other procedures include cancellation of the recording pause,

wherein the execution control step includes:

an execution permitting substep of, when the discrimination substep recognizes

that the instruction for the recording pause has been received in the receiving substep,

(1) immediately permitting the execution of the recording pause, in case that the
number of frames included in the first object is the predetermined number or more, and

(2) waiting for the number of frames included in the first object to increase to the
predetermined number or more and then permitting the execution of the recording pause, in case
that the number of frames included in the first object is less than the predetermined number;

an execution substep of

(1) allowing recording to pause and enter a standby mode, when the execution
permitting substep permits the execution of the recording pause, and

(2) allowing recording to be resumed, when the discrimination substep recognizes
that the instruction for the cancellation of the recording pause has been received during the
standby mode in the receiving substep; and

a recording area changing substep of allowing the first object being recorded on
the first recording area to be completed before the execution of the recording pause by the
execution substep and allowing the second object to be recorded on the second recording area
after the execution substep allows the resumption of recording.

17-20. (Cancelled)